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CANADIAN INDUSTRIES LIMITED



ANNUAL REPORT
1945

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ANNUAL REPORT

THE DIRECTORS have pleasure in submitting herewith the Annual Report of Canadian Industries Limited for the year 1945.

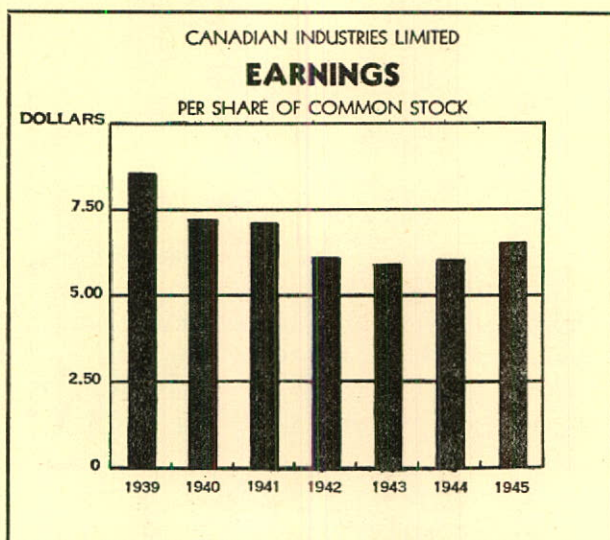
Wartime experience has created a new and larger conception of the production potentialities of industry and technology in Canada. Not only was the prewar rate of expansion in the output of commercial chemicals almost maintained, but Defence Industries Limited, the wartime subsidiary which is in the process of winding up its operations, grew to a size which at one time greatly surpassed Canadian Industries Limited.

Since almost unlimited productive ability is an integral part of the present industrial structure, it is of the utmost importance that greater commercial markets be developed to replace the impetus of war business if the resources of the nation are to be fully utilized. In fact, the forward strides in production techniques have been so rapid that the real difficulties of today are in the field of distribution and consumer buying. Such problems usually contain an additional complication in that a solution does not lie within the grasp of any one organization, as demand is the resultant of all the diverse forces that go to make up the economic life of the country. The contribution of industry to any concerted action to promote an expanding demand, is the achievement of the highest degree of efficiency in production, distribution and administration, and the greatest possible utilization of scientific discoveries.

It was to these tasks, which had of necessity been superseded by other more urgent matters during wartime, that the management of Canadian Industries Limited again turned its attention in 1945, and efforts in this direction will be intensified in the year ahead.

FINANCIAL REVIEW

There was an improvement of 8% in net income for 1945, but profits were still well below the average for the last four prewar years as the decline between 1939 and 1943 was only partially offset by the recovery in the succeeding two years.



During the war, factors external to the Company exerted a determining influence on profits, as many of the measures taken to combat inflation had the indirect effect of restricting net income. It is therefore pertinent to re-appraise those developments which brought about the wartime decline in the profits of the Company. From the outbreak of war, operations of Canadian Industries Limited were adversely affected by the transfer of many of the senior administrative and technical personnel to Defence Industries Limited, where their entire efforts were devoted to the production of munitions. Wage rates advanced and under the pressure of scarcities raw material prices increased. Narrower profit margins resulted from the maintenance of selling price ceilings in the face of rising costs. Furthermore, wartime tax rates combined with these factors to reduce profits in spite of the greater volume of sales and the increase of \$18,600,000 in plant investment since the beginning of 1936.

The effect of all these factors is reflected in the following comparison of average earnings and dividends for the six war years and the four years immediately preceding 1940:

	Earnings per Common Share	Dividends
Average, 1940-45	\$6.52	\$5.83
Average, 1936-39	7.22	6.75

For the immediate future, opportunities for effecting important reductions in manufacturing costs appear to be limited to increased operating efficiency and new techniques. The progressive release of trained employees from wartime duties is making possible the concentration of the entire efforts of the organization on commercial problems.

Income from Operations

Sales for 1945 showed a minor increase over the preceding year and although the factors which depressed wartime profits continued to exert a strong influence, income from operations, before deducting taxes, was 6% higher than in 1944. The resumption of commercial business contributed to the improvement and it was possible, in line with experience, to reduce the charge for depreciation on certain manufacturing units. There were decreases in some raw material prices, but of more significance were the removal of the war exchange tax and a decreasing reliance on the use of costly substitute products.

Throughout the war period new facilities were provided and other measures were taken to increase the production of essential materials, although it was recognized at the time that losses would ultimately be suffered because of such decisions. During 1945 some of these expected losses were suffered, and a total of \$138,000 was charged against the war contingencies reserve set aside during the war years for this purpose. Further losses of this nature are expected to be incurred in 1946, but it is estimated that the balance in the reserve at 31st December 1945 will be adequate to meet such charges.

Early in the war years, the Company adopted a policy of limitation of profits on sales for war purposes and many voluntary refunds were made to the government consisting of savings resulting from greater volume or lower manufacturing costs than originally estimated. Over-all renegotiation of profits on war business for the five years ended 31st December, 1944, was completed during the year. The resultant refund to the government arose mainly from the adjustment of profits on commercial products used indirectly by a wide range of customers for war purposes and equalled the provisions set aside in prior years. In the course of the renegotiation, an examination was made by representatives of the Department of Munitions and Supply and of the Comptroller of the Treasury, and the government has confirmed that it is of the opinion that the final selling prices of products sold for war purposes, including direct war sales to

the government, to contractors, to sub-contractors, and to Defence Industries Limited, as well as the net amount realized from sales of all products comprising indirect war business, were fair and reasonable. Renegotiation of profits on direct and indirect war sales in 1945 is expected to be completed shortly, and no further provision for refunds has been deemed necessary.

Income from Investments

Contrary to the trend for the past three years, total investment income for 1945 increased somewhat over the preceding year, owing to the larger average investment in government securities. The total dividends received from subsidiary companies decreased slightly, and dividends on the holdings of this Company in General Motors Corporation and Dunlop Tire and Rubber Goods Company Limited remained unchanged from 1944.

In accordance with past policy, earnings of subsidiary companies have not been consolidated with those of Canadian Industries Limited, and have been included in investment income only to the extent of dividends declared. All subsidiaries earned profits during 1945, and the total income exceeded by \$620,000 the sum of dividends declared.

Provision for Taxes

In line with the increases in taxable operating profits and investment income in 1945, the provision for income and excess profits taxes at \$3,236,000 was \$103,000 higher than in 1944. The minimum tax rate of 40% was again applicable, and no portion of 1945 taxes will be refundable.

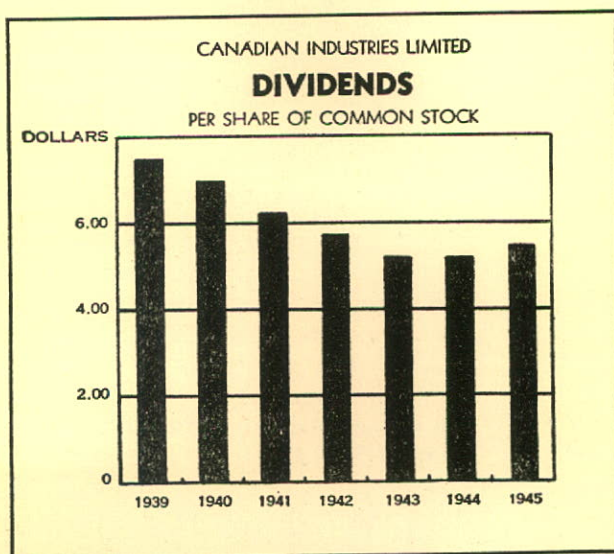
Total income and excess profits taxes payable by subsidiary companies in respect of 1945 profits were estimated at \$700,000 as compared with \$1,094,000 for the preceding year.

For the first time since the outbreak of war a reduction in taxes on corporate income has been announced and certain of the indirect taxes on costs have been eliminated or reduced. In respect of the year 1946, the maximum excess profits tax rate on income above standard has been reduced to 60% from 100%, but no portion of the tax at the new rate is refundable. While this reduction will provide a measure of relief to companies with profits above standard, it must be borne in mind that the minimum tax rate of 40% applicable to the greater proportion of all corporate income remains more than double the prewar level, and this factor together with the existence of so high a tax on profits above a fixed level is a brake on the effective development of the industrial economy of the nation. The persistence of high tax levies and price ceilings can at some point so hamper production as to augment rather than lessen the inflationary threat.

Net Income, Dividends and Surplus

Net income for 1945, totalling \$4,929,000, was 8% higher than in 1944, and earnings were equivalent to \$6.58 per common share, an increase of 54 cents per share over the previous year. Regular quarterly dividends totalling \$7.00 per share were paid on the preferred stock. Dividends on

the common stock were increased to \$5.50 for 1945 as compared with \$5.25 for 1944, but were still considerably less than the average of the last four prewar years. Equal payments of \$1.25 per share in April, July and October were followed by a final disbursement of \$1.75 in January 1946. Earnings for the year exceeded dividends by \$753,000 and earned surplus stood at \$7,131,000 at the end of the year. Capital surplus has remained virtually unchanged for more than ten years and consists almost entirely of the gain realized on the sale of a part of the holding of shares in General Motors Corporation.



Current Assets

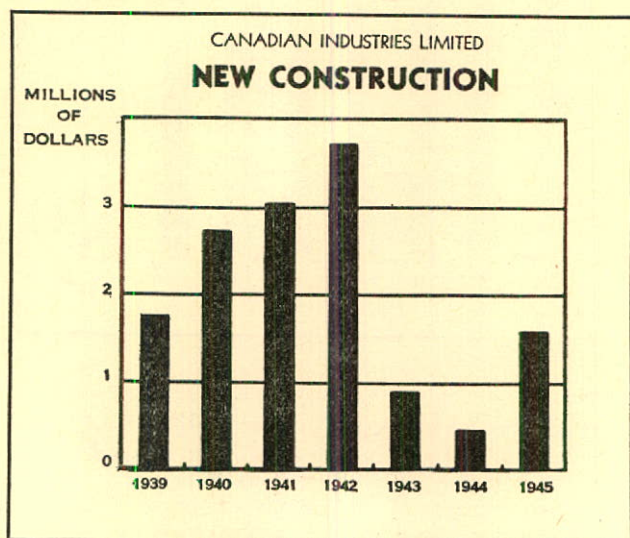
Net working capital showed an increase of \$1,236,000 during 1945. The increase in cash and securities was brought about by the abnormal conditions of the past few years, when construction was limited to what was required for war or essential purposes and the volume of inventories was reduced by raw material shortages. Provision for the war contingencies reserve which was set aside to meet future losses arising out of wartime operating conditions has resulted in a temporary addition to working capital.

Although total inventories were less than at the end of 1944, an easing of the raw material supply situation later in the year made possible a slight increase in stocks of some materials. In October the government rescinded the war exchange tax and reduced the cost of U.S. funds required to pay for imports, and the resultant loss in value of stocks on hand at that time was written off against the inventory reserve provided for such purposes earlier in the war years. After deducting the remainder

of the reserve from inventories, the on-hand cost of which continued to be far in excess of average 1939 prices, the net value of stocks on hand at the end of the year was unchanged from 31st December, 1944.

Fixed Assets

There was a further expansion of \$1,277,000 in fixed operating investment during 1945, and plants, buildings and equipment and land stood at \$45,832,000 at 31st December. Extensive plans have been made for the resumption of the development program of the Company and proposed capital expenditures totalling \$4,980,000 were authorized in 1945, including a further major extension to the Nylon Works and additional paint manufacturing facilities. The capacities of several other units will be expanded or their production processes improved. Although material and labour shortages resulted in delays in construction work in 1945, greater progress was made towards the end of the year and a total of \$1,670,000 was expended.



Satisfactory progress was made on repairs and maintenance that had been deferred owing to pressing wartime production demands, and total repair and maintenance costs of \$2,300,000 for the year were high in relation to prewar years. Further minor outlays will be necessary before equipment is fully restored to prewar standards of efficiency. An amount of \$2,173,000 was charged to operating costs in respect of depreciation, a decrease of almost \$300,000 from 1944, as depreciation rates were reduced on some plants in line with operating conditions and experience.

OPERATING REVIEW

Total sales volume of Canadian Industries Limited for 1945 was more than maintained in comparison with the previous year despite the decline in the industrial output of the nation. As peacetime production was resumed, however, the relative demand for individual products underwent a considerable change. Direct military orders, which amounted to only 6% of sales during the past year, were never large in comparison with other business. Nevertheless, the curtailment in war production had an indirect effect on the Company since it caused decreased activity in many of the industries that use large quantities of chemicals. In the last quarter of the year, this decline in demand was accentuated temporarily by wide-spread reconversion, although the sales of most products continued at a high level. Consumption of many chemicals, the output of which had undergone a marked increase to meet abnormal wartime needs, may not be entirely restored for some time, but the loss should be more than offset by an expansion in sales of other chemical products needed to meet peacetime requirements.

A factor of major importance in maintaining sales volume in 1945 was the existence of a large commercial market for most chemicals no longer needed for direct or indirect war purposes. The termination of armed conflict brought about a progressive increase in sales to many customers who were gradually recovering from the curtailment in commercial production necessitated by wartime conditions. Another stimulating factor was the large deferred demand that became effective as soon as restrictions on distribution were removed. An improvement in the supply of raw materials made possible higher production of other chemicals and volume will be further expanded when it is once more possible to meet all market requirements. The necessity of replenishing distribution channels strengthened current demand and the high level of consumer purchasing power had a sustaining effect on sales of a wide range of manufactured and resale products.

It is possible to discern in the multiplicity of factors affecting the business of the Company certain major developments which exerted a determining influence on sales during 1945. Broadly speaking these included the change in the type of demand from a wartime to a peacetime basis; the cessation of direct war business; and the raw material supply situation. The following brief survey shows the effect of such developments on sales of major products of the Company.

Changed Type of Demand

There was a minor decline in sales of sulphuric acid, but some reduction in the consumption of heavy chemicals was inevitable as the output of the durable goods industries, which are normally large consumers of such products, has been curtailed by reconversion.

Greater quantities of chlorine were made available for commercial use by the decline in the needs of war industries, and the removal of quota restrictions permitted larger shipments to pulp and paper manufacturers. Sales of caustic soda were more than maintained in 1945 as a result of increased consumption by the soap, textile and pulp and paper industries. Although sales of dyestuffs tended to improve, the curtailment in war industries affected the demand for many organic chemicals, including chlorhydrocarbons for degreasing purposes.

The demand for sheeting and other plastic materials for war purposes declined, but the loss was largely offset by heavier commercial requirements. As a result of the removal of restrictions, nylon monofilament could once more be used for all types of brushes.

The downward trend in the sales of explosives, which has been in evidence since 1940, continued partly as a result of the declining activity in certain base metal mines, but some improvement is looked for as gold mining increases and as more construction gets under way.

Although consumption of salt for meat packing and railway car refrigeration was lower than in the preceding year, capacity operation of production facilities was needed to supply household, agricultural and industrial requirements.

Cessation of Direct War Business

Government contracts for nylon yarn were terminated by the fourth quarter and production for civilian purposes began immediately. Distribution was under the control of the Wartime Yarn Supply Committee and the entire output was allocated to the full-fashioned hosiery industry. Opportunities for the development of other markets will arise in the second half of 1946 when the plant expansion program is completed.

Restrictions on the distribution of sporting ammunition were entirely removed during the third quarter of the year and a high level of commercial production was attained. Output may decline somewhat when retail stocks have been replenished.

Inadequate Supplies of Raw Materials

Raw material shortages made it impossible to meet all of the heavy requirements arising from the expanded food production program and as a result the demand for fertilizer continued to exceed production. Similarly, sales of "Cellophane" cellulose film would have been higher if ingredient scarcities had not interfered with operating schedules. Sales of coated fabrics were also limited by the short supply of materials, but it was possible to increase commercial business as production for military purposes declined.

As raw materials previously consumed in the supplies needed by war industries became available, output of commercial paints, lacquers and other finishes expanded and sales reached a new high level. Paint prod-

ucts for retail distribution were in heavy demand and sales to the automotive and other industries are expected to advance when large-scale civilian production is resumed.

Production

Most plants of the Company continued to operate at close to capacity throughout 1945, although war demands became less urgent. Production difficulties tended to ease as improvement in raw material supplies permitted more economical scheduling of operations and decreased the frequency of production interruptions. The return of technical personnel and skilled operators to the Company from Defence Industries Limited and the armed services also helped to raise the level of efficiency. Nevertheless the sustained high rate of output of previous war years together with the difficulty of obtaining needed replacement equipment caused output to fall below capacity in certain instances. But the measures being taken to restore machinery and equipment to the highest state of operating efficiency and the planned improvement in processes should tend to restrain the upward pressure on costs.

Plant Expansion

The largest commercial construction project undertaken during the year was the expansion of nylon plant facilities at Kingston, Ontario. When the work is completed, rated capacity will be almost six times greater than when the first unit was designed in 1940 and will include equipment for the manufacture of nylon flake from nylon salt solution—a process which carries production farther back towards the raw material stage. Elsewhere equipment was installed to produce certain products not formerly manufactured in Canada and additional capacity is being provided for the production of "Cellophane" cellulose film. The Paint and Varnish Works at Montreal is being extended and a new plant at Toronto is planned for 1946 to supply finishes to the automotive and industrial trades. In a number of plants greater output has been made possible by re-designing equipment and by adopting more highly mechanized methods of operation. Additions were made to storage facilities during the year. Studies in progress are aimed at the eventual manufacture of additional products, the enlargement of existing facilities and the adoption of new technical developments which had to be deferred because of war conditions.

Technological Developments and Research

The termination of the war has enabled the Company to re-direct the energies of its technical staff to purely commercial developments. Progress is being made on the expanded research program announced in the 1944 annual report, but in order to retain high standards of performance, additions to personnel and the enlargement of laboratory facilities must take

place by planned stages. Experience has demonstrated that sustained and costly efforts over a lengthy period are usually required before tangible benefits can be realized.

In line with the policy of promoting greater production efficiency, the first concern of the Company has been the investigation of opportunities for process improvements and there is little doubt that the prewar rate of technical advance will be resumed shortly. Efforts have been concentrated also on the product modifications necessary to meet new market requirements; the commercial development of chemicals already known; and the establishment of new uses for existing products. Several research projects have reached the pilot plant stage, although progress has been retarded by the difficulty of obtaining the needed equipment.

The search for new products and processes has been intensified and as the research program expands, additional exploratory work will be devoted to those developments which are of particular significance to this country. Regardless of the amount of research undertaken in Canada, however, such work will need to be complemented by the scientific discoveries of other lands if this country is to keep abreast of technological progress. As a result of its association with Imperial Chemical Industries Limited and with E. I. du Pont de Nemours and Company, Canadian Industries Limited has obtained new products and process developments and a wealth of technical knowledge under agreements of long standing.

Attention has been given also to the many chemicals that are used to improve the production processes of customers, and the promotion of a wider acceptance of such production techniques has had encouraging results. As the demands of war industry and government departments for the services of the technical staff declined, it was possible to render greater assistance to peacetime consumers, but this important aspect of the contribution made by the Company to industrial progress has not yet been restored to prewar standards.

DEFENCE INDUSTRIES LIMITED

Defence Industries Limited, a company created in 1939 to engage in large-scale munitions production, has largely fulfilled its purpose, and the publicly-owned plants, with the exception of the atomic energy development which is still under construction, are being turned over to the government.

At the urgent request of the government and without remuneration, Defence Industries Limited in July 1944 took on the dual responsibility of supervising the construction of the Chalk River atomic energy project and of designing the intricate equipment used in the production processes. The necessary scientific data to permit competent design were supplied by the National Research Council.

As stated in previous annual reports, the only sales of munitions by Canadian Industries Limited before the outbreak of war were to supply the limited requirements of the federal, provincial and municipal governments of Canada, and minor shipments to other parts of the British Empire. For these purposes, a small unit for the production of cordite at Beloeil, Quebec, had been kept in operating condition and in 1938, at the request of the United Kingdom Government, facilities were provided for the limited production of TNT. In September 1939 these units, together with the experienced operators, were transferred to Defence Industries Limited. In addition, the knowledge and skills gained from commercial experience made a material contribution to the success of the wartime program, and such aid was especially valuable in the early war years. Large-scale munitions production was, however, greatly facilitated by access to the scientific and technical information possessed by other allied nations and Defence Industries Limited developed production techniques which were adopted by other countries.

Only now that the job of producing for war is completed is it possible to appraise the achievement of this great production endeavour. During the first three years of the war, this subsidiary grew from a core of key administrative, technical, and operating personnel to become one of the largest industrial enterprises ever undertaken in this country. Construction and production involved an expenditure by the company as agent for the government of about one thousand million dollars between 1940 and 1945. The projects undertaken by the company provided for the production of chemicals, high explosives, propellents and small arms ammunition, as well as shell-filling and fuse-assembly.

Fifteen projects were designed and constructed for the government by Defence Industries Limited and not only were most of them completed and in operation well ahead of schedule, but in the aggregate the costs were below the estimates. The company assumed responsibility for the operation of the fifteen projects and in addition was asked to take over management of another large shell-filling plant in 1944. At one time about 33,000 persons were in the employ of the company. Production in the government-owned plants began in the last quarter of 1940 and mounted steadily as new units came into operation and maximum efficiency was attained. Total output exceeded original expectations as many units were able to reach operating levels considerably above designed capacity. Production costs were for the most part lower than estimated and the products manufactured met the most rigid specifications with a minimum of rejections. Defence Industries Limited was also called upon to aid other companies engaged in the production of chemicals and explosives when the help of its organization was needed in the design, construction or operation of wartime projects.

The curtailment in military demand that followed the cessation of hostilities ended the usefulness of most of the plants under the management of Defence Industries Limited. Because of the nature of the processes, many of the plants contained buildings and equipment contaminated by

DEFENCE INDUSTRIES LIMITED

RECORD OF ACCOMPLISHMENT 1939 to 1945

CONSTRUCTION

The construction program included the erection of 2,400 buildings with a volume of 211 million cubic feet. Buildings were also erected to house 17,000 persons. Total area of all plant sites amounted to 25,000 acres. Steam generating facilities provided 1,560,000 pounds per hour and water pumping capacity totalled 58,000 gallons per minute. There were constructed 110 miles of railway, 90 miles of roads, 220 miles of electric lines, 90 miles of water lines and 60 miles of steam lines. Locations of the projects designed, constructed and operated were as follows:

Military Explosives:

Nobel, Ont., Winnipeg, Man., de Salaberry and Beloeil, Que.

Chemicals:

Shawinigan Falls, Que., and Windsor, Ont.

Small Arms Ammunition:

Brownsburg, Verdun, Montreal and Westmount, Que.

Shell Filling:

Bouchard and Montreal, Que., and Pickering, Ont.

In addition in 1944 management of the shell-filling plant at Cherrier, Que., was taken over, and the designing and erection of the atomic energy project under construction at Chalk River, Ont., was undertaken.

PRODUCTION

Military Explosives:	346,000 tons
Chemicals:	71,000 "
Small Arms Ammunition:	2,889,072,000 rounds
Shell Filling:	182,914,000 units

From 1939 to 1945, production required more than 264,000,000 man hours, and approximately 1,200,000 tons of coal and 600,000,000 kilowatt hours were consumed.

explosives. Acting under the instructions of the Plant Decontamination Committee of the Department of Munitions and Supply, the company undertook the desensitizing of the plants and where explosives could not be neutralized certain assets were destroyed by fire after removal of all salvageable materials. Much of this work has been completed and by the end of the year six plants had been turned over to the government.

Although Defence Industries Limited was not required to provide the capital for the construction and operation of the publicly-owned plants, it is nevertheless apparent from the foregoing record of accomplishment that the undertaking represented a very heavy responsibility. Failure of the company to cope successfully with any part of its obligations would have had far-reaching results and in turn would have reacted seriously to the detriment of Canadian Industries Limited. As evidence of the manner in which the responsibilities were carried out, a letter from the government on conclusion of the military small arms ammunition program, which is but one of the several congratulatory messages received from representatives of the Dominion and allied governments, is reproduced in part below:

"Since its establishment, shortly after the war began, Defence Industries Limited has produced approximately two-thirds of the small arms ammunition manufactured in Canada during that period. This in itself was an achievement of great magnitude, but in addition the quality of that production was consistently high and the cost gratifyingly low, all of which reflects the very efficient management which has been characteristic of the undertaking."

The accident frequency rate is a measure of the efficiency of an organization since favourable experience in this respect is dependent upon the successful execution of a great number of managerial functions ranging all the way from plant layout to employee training. In the year in which the output was highest, the lost-time injuries per million hours worked totalled 5.3 for Defence Industries Limited as compared with an average of 14.5 for all industries in the United States and Canada reporting to the National Safety Council.

The termination of this vast productive undertaking is an opportune time to recognize once again the share of employees in the achievements of Defence Industries Limited. To the army of men and women who worked in factories and offices, high praise must be accorded, not only for their arduous efforts, but also for their collaboration with management to meet urgent demands and to overcome the difficulties incidental to the rapid growth of such a large organization. It is a pleasure to repeat earlier acknowledgments of the energy and resourcefulness displayed by other industrial concerns in responding to calls made upon them in their capacities as suppliers and contractors. The opportunity is also taken to record the co-operation which the company experienced in its relation-

ship with the Department of Munitions and Supply and government representatives whose assistance in the solution of many urgent matters and in the procurement of essential requirements of materials in short supply was much appreciated.

Defence Industries Limited has been compensated for its services in operating government-owned plants as agent for the Crown largely by means of fixed sums per unit of output. The rates have been lowered where economies have been effected in production costs or where output has exceeded designed capacity. In 1945 management fees constituted virtually the only source of income for the company and the net income for the year showed a decrease of 25% from 1944. Shortly after the close of 1945 the standard profit was established by the Board of Referees under the Excess Profits Tax Act and the tax liability has since been determined. After deducting administrative expenses and taxes (but not the refundable portion of taxes) the net income from management fees for the entire war period represented about three-tenths of one per cent of all the costs incurred as agent for the Crown.

SUBSIDIARY AND MANAGED COMPANIES

Subsidiary Companies

A brief summary of the activities of subsidiary companies appears on page 17, and operations of Defence Industries Limited have been reviewed in more detail in preceding pages of this report.

Sales of subsidiary companies were generally higher than in 1944, but raw material supplies continued to limit the volume of output, and the reconversion of industry to commercial production caused marked changes in the type of demand. Total profits and dividends were below the level of 1944 although the results of some companies showed improvements over the preceding year. The amount invested by Canadian Industries Limited in shares and bonds of the subsidiary companies represents less than 5% of its total assets.

Other Managed Companies

Canadian demand for carbon bisulphide manufactured by Cornwall Chemicals Limited showed a further expansion in 1945, but total sales of the product were less than in the preceding year owing to a contraction in export business. Although operating profits were somewhat lower, it was possible to maintain the dividend rate established in 1944.

Total sales of Dunlop Tire and Rubber Goods Company Limited again increased over the preceding year, although there was a marked decline in output of war products. The greater proportion of civilian sales resulted in an improvement in total operating profits, and the dividend of \$1.25 per share on the common stock remained unchanged from 1944.

SUBSIDIARY COMPANIES

COMPANY	PRODUCTS AND OUTLETS	THE YEAR IN BRIEF
Aluminate Chemicals Limited	Sodium aluminate and chemical compounds for boiler water treatment, slime control and general industrial purposes.	A further expansion in sales was achieved during 1945 as a result of the heavier requirements of railroads and the pulp and paper industry.
Canadian Henson and Van Winkle Company Limited	Metal-plating supplies and equipment, degreasing solvents and machines, industrial brushes and buffs.	Despite raw material shortages sales were higher than in the preceding year. The curtailment of war demand was more than offset by the heavier requirements arising out of industrial reconversion.
Canadian Safety Fuse Company Limited	Fuse and blasting accessories for mining and other industries.	Commercial business has declined because of the decreased activity in the mining industry.
Canadian Titanium Pigments Limited	Titanium pigments sold largely to paint manufacturers.	The upward trend in sales continued in 1945 as increased supplies were available. Demand from paint manufacturers continued at a high level.
Defence Industries Limited	Munitions production.	See page 12.
Gardinol of Canada Limited	Sulphated higher alcohols used as detergents in the textile and other industries.	Removal of restrictions on supplies made possible a moderate expansion of sales.
McArthur Chemical Co. Limited	Wholesalers of a diversified line of chemicals, waxes, laundry and dry cleaning supplies, tanning extracts, and other products.	Sales were slightly higher than in 1944.

EMPLOYEE RELATIONS

Employment

The addition of 500 employees to the personnel of Canadian Industries Limited during 1945 represented an increase in employment of 8% since the end of 1944. The expansion in employment which has followed the sustained growth of the Company is apparent when the total number of employees at 31st December 1945—6,500, is compared with 1940—5,400, and with 1935—3,000. Of the present employees, 1,735 have been with the Company ten or more years, including 108 who have at least thirty years of service.

Employee Representation

At all works of the Company, except for a few smaller units, employees on hourly rates of pay are represented, in many matters affecting their relations with the Company, by either works councils or unions. At no time has stability in employee relations been of greater importance to the nation, to industry, and to the individual, and the Company earnestly seeks the continuation of such stability within its organization to enable it to give undivided attention to the heavy demands arising from industrial reconversion in Canada.

Industrial Relations Plans

No changes were made during 1945 in the terms and provisions of the industrial relations plans and as in previous years a synopsis of the plans containing personal security features is given in table form. (See page 19.)

Through medical services further progress was made in encouraging annual physical examinations of employees and preliminary consultations on matters of health, as well as in promoting healthful working conditions in factories and offices.

It is with regret that the Board reports the death of three employees from an explosion of unknown origin at the Brainerd Works. Methods of eliminating or controlling the causes of accidents are under constant study and the Company requires of its supervisory forces a rigid adherence to safety regulations. The infrequency of serious accidental injuries among employees, while a source of gratification to the management, is a tribute to the interest and care which employees have shown in this aspect of their daily work.

Employees on National Service

The scheme under which, where applicable, grants to supplement pay and allowances from the armed forces were paid to men who were with the Company before the war, continued in effect at the end of the year.

CANADIAN INDUSTRIES LIMITED

INDUSTRIAL RELATIONS PLANS WITH PERSONAL SECURITY FEATURES

Name of Plan	Savings	Vacations	ILLNESS OR INJURY	HOSPITALIZATION	RETIREMENT	DEATH
Purpose of Plan	Co-operative Savings Plan. A yearly plan first introduced in 1935. To encourage regular saving. Since 1940 the major portion of employees' savings under the Plan has been invested in war savings certificates.	Vacation Plan. Original plan introduced in 1935. To provide an annual vacation with pay of two weeks, the second week being subject to annual authorization.	Disability Wage Plan. Original plan introduced in 1937. To provide against total loss of earnings during periods of disability resulting from illness or accident. Maximum payment equivalent to thirteen weeks' full wages following first week of absence.	Co-operative Health Insurance Plan.* Original plan introduced in 1935. To provide against extraordinary hospital, surgical and certain other medical expenses arising from non-occupational disabilities.	Pension Plan. Original plan introduced in 1919. To provide monthly payments to employees substantially incapable of continuing to perform normal duties. (Non-contractual).	Employees' Benefit Plan. Original plan introduced in 1920. To provide on the death of an employee or pensioner a benefit ranging from \$1,000 after six months' service to \$1,500 after five years.
Employees Eligible to Participate	Employees having one year's service on 1st January of the current year and earning not more than \$250 a month.	Payroll employees on completion of one year's service and annually thereafter.	Payroll employees having one year's service, excluding a limited number of wartime employees because of certain disabilities.	Employees having six months' service, excluding a limited number of wartime employees because of certain disabilities.	Pre-war employees having 15 years' service.	Pre-war employees (including those on national service) and pensioners.
Company's Direct Contribution	Company contributes in war savings certificates 25 cents on each dollar of employees' savings invested in war savings certificates at end of Plan.	Total cost borne by Company.	Total cost borne by Company.	Premiums paid jointly by Company and participating employees.	Total cost borne by Company.	

*Family Hospitalization Insurance added in 1944 as supplement to Co-operative Health Insurance Plan. Premiums paid by insured employees.

31st December, 1945.

Similar grants are being paid to prewar employees who are temporarily unable to resume employment after discharge while receiving medical treatment from the government.

A warm welcome is being extended to employees returning from service in the armed forces and careful attention has been given to every detail in the arrangements for their reinstatement. Already nearly two-thirds of the enlisted employees who were with the Company before the war are back at work and a large number who joined the Company during the war have returned to its employ. Furthermore, employment has been provided for nearly 300 ex-servicemen who were not previously employees of the Company. An interesting item taken from the records is that at 31st December 1945 almost 25 % of the men employed by the Company were veterans of either World War I or World War II.

In the early months of 1945, three more employees were reported to have been killed in action, bringing to thirty-nine the number of employees known to have lost their lives on active service since September 1939. On behalf of the whole Company, the Board extends sincere sympathy to their relatives. No words are adequate to pay tribute to the valour and the sacrifice of those who served; and the memorial to those who died must not be less than the pledge to safeguard for all mankind the freedom for which they gave their lives.

Organization

There were no major changes during 1945 in the structure of the organization, but the functions and relations of the various units and the allocation of responsibilities were under continuous scrutiny to ensure that no opportunity for greater administrative efficiency was overlooked.

It was noted a year ago that a very great increase in personnel had taken place over a period when employees with experience in supervisory functions had been preoccupied in meeting the demands of heavy working schedules and that under this handicap training and educational activities had suffered. In 1945 it became possible to take steps towards rectifying this situation. A staff training program was inaugurated early in the year and the fifth course was in session by December. Towards the end of 1945, courses aimed at developing supervisory talent were introduced in which special attention was paid to the techniques of training and the handling of employee relations matters. Although still in its early stages good progress was made in this endeavour and greater benefits should accrue in the months ahead.

In previous annual reports reference was made to the patience and understanding which employees displayed under wartime conditions. The extent to which the Company was successful in meeting the demands made upon it during the war was largely dependent on the individual efforts of the men and women in its employ and the Board wishes to place on record its recognition of the spirit in which they performed their duties. It will be obvious to all that the obligations and responsibilities of industry during the difficult period of national reconversion may

prove no less onerous than during the years of war, and the measure of success attained by the Company in meeting them will again depend on united efforts to achieve the highest possible degree of efficiency.

Bonus Plan

Since its inception in 1923, the Bonus Plan has been an effective method of giving special recognition to those employees whose services have been marked by unusual interest in furthering the progress of the Company beyond the satisfactory performance of their regular duties. Under the provisions of the Plan the amount available for distribution is determined by the Board of Directors, and is limited to a maximum of 15% of the net income of the Company, after deducting taxes, in excess of 6% on the capital stock and earned and capital surplus; the investment in and the income from shares of General Motors Corporation are not included in the calculation of the bonus fund.

As the fund is based on profits, the amount available in the war years has been considerably lower than in the years immediately preceding the war and, although the fund has increased over the previous year, the amount awarded in respect of 1945 is less than in any prewar year since 1935. Awards are decided by a Bonus Committee which is elected annually by the Board of Directors and is composed of directors who are not salaried officers or employees of the Company and who do not participate in the awards. For the year 1945, awards were made to 184 employees, including the President and First Vice-President who are also directors of the Company.

Under the terms of the Plan the awards are delivered in four equal annual instalments, and, in accordance with the temporary policy adopted three years ago because of the abnormally high wartime level of personal tax rates, all deliveries made in 1945 were in the form of cash. One of the basic principles of the Plan, however, is that awards should be in the form of common shares of the Company, in order to provide outstanding employees with a continuing interest in the progress of the Company. The Bonus Committee is empowered by the terms of the Plan to decide that any future awards or any undelivered instalments of past awards, may be delivered in the form of shares as soon as conditions justify the expectation that employees will be in a position to retain the shares awarded. The operation of the Plan continued to be subject to the restrictions imposed by the Wartime Salaries Order.

DIRECTORS

Because of ill health, Sir John Nicholson retired from the Board towards the end of the year. He had been associated with the Company as a director for six years and his resignation was accepted with much regret. The vacancy was filled in December 1945 when William Henry Coates, Ph.D., was appointed a director.

A BRIEF HISTORY

Abnormal conditions so influenced operations in 1945 that an analysis limited to the results for the year would provide shareholders with less than a complete picture of the position of Canadian Industries Limited. A brief review of the growth and development of the Company is therefore presented in order to give an enlarged perspective for appraising past accomplishments and future prospects.

The trend of industrialization in the Dominion had reached by 1927 the point at which demand for chemical products in increasing quantity and variety could be met effectively only by an integrated chemical industry. In the year following its decision to embark on an expansion program Canadian Industries Limited purchased three production units in the heavy chemical field to supplement its own plants which manufactured explosives, paints, coated-fabrics and other products. The new units were subsequently modernized and enlarged. New equipment was added for the utilization of by-products, large-scale opportunities for which are often inherent in the nature of the chemical industry. Despite their diversified end-uses, many products of the Company are inter-related through either common raw materials or common production processes. Within two years of the beginning of the expansion program, serious repercussions from a depression of world-wide magnitude were experienced by the Dominion. The impact of this downturn in business slowed but did not halt the carrying out of plans for development.

After 1929 the problem was one of combatting a falling demand and it was met by the introduction of new products, the installation of more efficient processes and the development of new uses for existing chemicals. While all the activities of Canadian Industries Limited participated in the growth which occurred during the period, the outstanding developments were "Cellophane" cellulose film, heavy chemicals and fertilizer in the years before 1939 and nylon since the outbreak of war.

The investment in physical properties has increased since 1929 by \$27,154,000 despite the discarding of obsolete plants and equipment. Over half the additions to plant capacity took place during the decade of the thirties notwithstanding the depression and the uncertainties arising out of the threat of war.

Such deliberate efforts to foster the maximum rate of growth and development brought about an increase of 80% in sales in the ten years between 1929 and 1939, and a further marked advance during the war. Employment, which underwent a gradual but persistent increase, is 164% higher than in 1929 and plant investment was expanded by 145% during the same period.

The contribution of Canadian Industries Limited to enduring progress was dependent upon the achievement of two objectives which have always been given the first attention of management. The Company has concentrated on the commercial production and consumer acceptance of those worth-while scientific discoveries which were made available to it or which resulted from its own research activities. Of equal importance

have been the efforts put forward to achieve and maintain the highest possible degree of operating efficiency. The success achieved is evidenced by the fact that the weighted selling price index of the manufactured products of the Company is today 14% lower than in 1929 although wholesale prices for the entire nation are 8% higher.

OUTLOOK

As industry turns again to the pursuits of peace, it cannot be overlooked that, while the tasks of war have been met, many difficulties lie ahead. Not only do many of the problems which retarded material progress in the past remain unsolved but new ones have arisen in the wake of war. Yet difficult as they may be, they are not impossible of solution.

The chemical industry is a young industry and the pace of new developments indicates that its horizon is ever widening. Canadian Industries Limited possesses the physical and technological resources to maintain its place in an expanding economy. The twenty-seven plants of the Company are already on a peacetime basis. The foundation has been laid for an expanding research effort and customer relations have survived the stresses of wartime conditions. Of all the assets held by the Company, none is of greater importance than its organization comprising managerial talent, technical abilities and operating skills, all of which have been proved in the years of war. The task ahead is to co-ordinate all these resources into a sustained productive effort.

On behalf of the Board of Directors,

G. W. HUGGETT,

President and Managing Director.

29TH MARCH, 1946,
MONTREAL, CANADA.

CANADIAN INDU

BALANCE SHEET AT

ASSETS

CURRENT ASSETS

Cash.....	\$ 4,248,031	
Dominion and U.S. Government Securities.....	11,260,945	
(Market value \$11,287,900)		
Accounts Receivable, less reserve for doubtful accounts.....	4,746,488	
Customers.....	\$4,295,168	
Subsidiary Companies.....	116,833	
Other Accounts.....	334,487	
Inventories, valued at the lower of cost or market price, less reserve against future loss in inven- tory values.....	9,581,726	\$29,837,190
DEFERRED CHARGES TO OPERATIONS.....		182,429
PORTION OF 1942 TAXES REFUNDABLE NOT LATER THAN 31ST MARCH, 1948.....		60,700

FIXED ASSETS

Plants, Buildings and Equipment, based on the appraisals of the National Appraisal Com- pany (1927 to 1929) adjusted by the Com- pany's own engineers, with subsequent addi- tions at cost.....	\$44,151,797	
Land, at cost.....	1,679,996	
Goodwill, Patents and Processes.....	3,378,151	49,209,944
Investments in Subsidiary Companies.....	\$ 3,040,934	
Shares in Other Companies (including market- able shares, book value \$2,500,000, market value \$10,364,100).....	3,787,785	6,828,719
		<u>\$86,118,982</u>

Approved on behalf of the Board,
 G. W. HUGGETT
 C. C. BALLANTYNE } Directors.

STRIES LIMITED

31st DECEMBER, 1945

LIABILITIES

CURRENT LIABILITIES

Accounts Payable.....	\$ 4,235,857	
Subsidiary Companies.....	30,803	
Dominion and Municipal Taxes.....	1,717,189	
Dividends Declared.....	<u>1,306,622</u>	\$7,290,471

DEFERRED LIABILITIES..... 260,769

RESERVES

Depreciation of Plants, Buildings and Equipment.	\$29,019,136	
Depreciation of Securities.....	1,200,000	
Pension and Benefit Plans and Self Insurance....	4,717,693	
(In addition \$1,569,842 is held in an irrevocable Pension Trust Fund)		
War Contingencies.....	<u>1,011,712</u>	35,948,541

CAPITAL STOCK

Authorized	Shares	
Preferred 7% Cumulative Stock (par value \$100).....	75,000	
Common Stock (no par value)		
Class "A" Voting.....	660,000	
Class "B" Non-voting.....	<u>690,000</u>	
Issued and Fully Paid		
Preferred Stock.....	46,500	\$ 4,650,000
Common Stock		
Class "A".....	615,974	
Class "B".....	<u>84,167</u>	700,141 15,899,607

CAPITAL SURPLUS..... 14,938,384 35,487,991

EARNED SURPLUS (Including \$60,700 for the portion of 1942 taxes refundable not later than 31st March, 1948) 7,131,210

\$86,118,982

This is the Balance Sheet referred to in our attached report of even date.

P. S. ROSS & SONS, Chartered Accountants.

Montreal, 25th February, 1946.

CANADIAN INDUSTRIES LIMITED

CELLULOSE PRODUCTS GROUP

- "Cellophane" Division Plain transparent and moistureproof transparent "Cellophane" cellulose film.
- "Fabrikoid" Division "Fabrikoid", pyroxylin, rubber and synthetic resin coated fabrics; "PX" bookbinding, "Washade" window shades; "Alprox" and "P.C. Pontan" quarter-linings, Shoe buckram and other footwear material; "Fabrilit" plastic film.
- Paint and Varnish Division Finishes for every purpose in home and industry, including such products as "Duco", "Dulux", "Trutone" White, "Cilux" Enamel and No. 7 Specialties. A complete range of finishing materials for the automotive, railway, marine, aircraft, industrial, maintenance and retail trades.
- Plastics Division Combs; tooth-brushes; "Lucite" (acrylic resin) and other transparent and opaque plastic sheets, rods and tubes; moulding powders; "Plaskon" resin glue for plywood; X-ray film and chemicals; "Lucitone" denture material; nylon monofilament for brush bristles, etc.

CHEMICAL GROUP

- Alkali Division Caustic soda and other alkalis; chlorine; bleaching powder and other chlorine derivatives.
- General Chemicals Division Commercial and C.P. acids; ammonia and other refrigerant gases; zinc and ammonium chlorides; fluxes; sulphites and hyposulphite; silicates and numerous other industrial chemicals.
- Nylon Division Nylon yarn for the textile industries.
- Organic Chemicals Division Dyestuffs and intermediates; neoprene and rubber chemicals; dry colours and pigments; mining chemicals; hydrogen peroxide; chlorinated solvents and other organic chemicals.

EXPLOSIVES AND AMMUNITION GROUP

- "Dominion" Ammunition Division Shot-shells with waterproof "Duco" finish and all other classes of sporting ammunition embodying "Super-Clean" non-mercuric priming; railway fuses, signals, explosive rivets, etc.
- Explosives Division Commercial explosives and blasting accessories.

FERTILIZER AND SALT GROUP

- Fertilizer Division Agricultural chemicals including compound fertilizers, superphosphate, insecticides, fungicides, weed killers, mineral and vitamin feeding supplements for livestock, etc.
- Salt Division All grades of "Windsor" salt for household, agricultural and industrial purposes.

